Datasheet for ABIN1889419
DLL4 ELISA Kit

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Overview

Quantity:	96 tests
Target:	DLL4
Binding Specificity:	AA 28-525
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	156-10.000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse DLL4
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: S28-P525
Specificity:	Expression system for standard: NSO Immunogen sequence: S28-P525
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g Nacl

Target Details

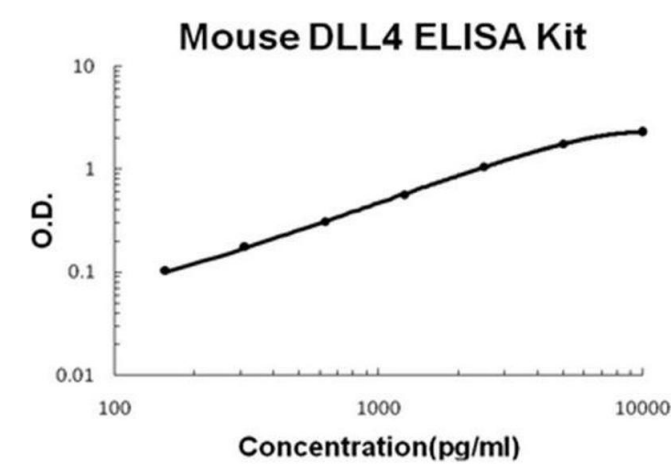|	
Target:	DLL4
Alternative Name:	DLL4 (DLL4 Products)
Background:	Protein Function: Involved in the Notch signaling pathway as Notch ligand. Activates NOTCH1 and NOTCH4. Involved in angiogenesis, negatively regulates endothelial cell proliferation and migration and angiogenic sprouting. Essential for retinal progenitor proliferation is required for suppressing rod fates in late retinal progenitors as well as for proper generation of other retinal cell types. During spinal cord neurogenesis, inhibits V2a interneuron fate. .
	Background: Delta like ligand 4 is a protein that in humans is encoded by the DLL4 gene. It is mapped to 15q15.1. This gene is a homolog of the Drosophila delta gene. DLL4 is a transmembrane ligand for Notch receptors that shows restricted expression to endothelial cells (ECs), in particular to arteries and capillaries, and is involved in vascular development, and it also appeared to be a major trigger of Notch receptor activities previously implicated in arterial and vascular development. Mouse DLL4 could activate mouse Notch1 and mouse Notch4. DLL4 acts as a negative regulator of tumor angiogenesis, its blockade results in the striking uncoupling of tumor growth from vessel density, presenting a novel therapeutic approach even for tumors resistant to anti-VEGF therapies. In addition to it, this gene also plays an important role in promoting Th17 effector activity during mycobacterial challenge.
	Synonyms: Delta-like protein 4,Drosophila Delta homolog 4,Delta4,Dll4,
	Full Gene Name: Delta-like protein 4
	Cellular Localisation: Membrane, Single-pass type I membrane protein.
Gene ID:	54485
UniProt:	Q9JI71
Pathways:	Notch Signaling

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well

Application Details

	assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Contains 1 DSL domain. Tissue Specificity: Expressed in vascular endothelium. Expressed in retina at least during embryogenesis. .
Plate:	Pre-coated
Protocol:	mouse DLL4 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for DLL4 has been precoated onto 96-well plates. Standards(NSO, S28-P525) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for DLL4 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse DLL4 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 10,000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL mouse DLL4 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse DLL4 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(ng/ml): 2.32, Standard deviation: 0.09, CV(%): 3.9 • Sample 2: n=16, Mean(ng/ml): 4.2, Standard deviation: 0.14, CV(%): 3.3 • Sample 3: n=16, Mean(ng/ml): 6.12, Standard deviation: 0.26, CV(%): 4.2, • Sample 1: n=24, Mean(ng/ml): 2.41, Standard deviation: 0.19, CV(%): 7.9 • Sample 2: n=24, Mean(ng/ml): 3.68, Standard deviation: 0.3, CV(%): 8.2 • Sample 3: n=24, Mean(ng/ml): 7.35, Standard deviation: 0.54, CV(%): 7.3
Restrictions:	For Research Use only

Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

Images

Mouse DLL4 ELISA Kit